

bearing 48, the liquid supply pressure is used to exert an axial lifting force on the spindle to compensate therefor.

IN THE CLAIMS:

Please cancel claim 7.

Please amend claims 1, 6, 10, 12 and 13 as follows (**a marked-up version of the amended claims is attached hereto**):

1. (Amended) A centrifugal separator for separating solid contaminants from a liquid supplied thereto at elevated pressure, said separator comprising:

a housing having a base part and a cover part releasably secured to each other, and

a separation rotor contained in said housing between the base and cover parts, said rotor being mounted in said housing by a spindle so as to be rotatable about an axis extending between the base and cover parts and to be displaceable along the axis between limits defined by said base and cover parts;

wherein said centrifugal separator further comprises a rotor restraint comprising:

a restraining surface forming part of, or carried by, the rotor and extending radially and circumferentially of the rotor and facing away from the base part, and

an abutment carried by the base part and having an abutment surface overlying the restraining surface at or beyond the limit of axial displacement of the rotor from the base part defined by the cover part, said abutment being operable to prevent further axial displacement of the rotor away from the base part if the cover part is removed; and

wherein the abutment comprises an axially extending body having, at a first end, a radially directed mounting flange for securing the abutment to the base part of the housing, and, at a second end, a radially inwardly directed flange overlying the restraining surface.

6. (Amended) A centrifugal separator according to claim 1, wherein the abutment is releasably secured to the base part and removable therefrom to permit removal of the rotor by axial displacement away from the base part.

10. (Amended) A centrifugal separator for separating solid contaminants from a liquid supplied thereto at elevated pressure, said separator comprising:

a housing having a base part and a cover part releasably secured to each other, and

a separation rotor contained in said housing between the base and cover parts, said rotor being mounted in said housing by a spindle so as to be rotatable about an axis extending between the base and cover parts and to be displaceable along the axis between limits defined by said base and cover parts;

wherein said centrifugal separator further comprises a rotor restraint comprising:

a restraining surface forming part of, or carried by, the rotor and extending radially and circumferentially of the rotor and facing away from the base part, and

an abutment carried by the base part and having an abutment surface overlying the restraining surface at or beyond the limit of axial displacement of the rotor from the base part defined by the cover part, said abutment being operable to prevent further axial displacement of the rotor away from the base part if the cover part is removed;

wherein the abutment is releasably secured to the base and removable therefrom to permit removal of the rotor by axial displacement away from the base;

wherein the abutment comprises an axially extending body having, at a first end, a radially directed mounting flange for securing the abutment to the base part of the housing, and, at a second end, a radially inwardly directed flange overlying the restraining surface;

wherein the axially extending body is a tubular, circumferentially continuous body;

wherein the abutment is configured to engage the base part by approach thereto in an axial direction and to be secured to the base part by rotation of the abutment about its axis; and

wherein the mounting flange has at least one mounting aperture therethrough having a varying radial width circumferentially and the base part carries a corresponding number of headed fasteners each dimensioned to pass through a said mounting aperture at the point of greatest radial width but not at the point of least radial width of the mounting aperture.

13. (Amended) A centrifugal separator for separating solid contaminants from a liquid supplied thereto at elevated pressure, said separator comprising:

a housing having a base part and a cover part releasably secured to each other, and

a separation rotor contained in said housing between the base and cover parts, said rotor being mounted in said housing by a spindle so as to be rotatable about an axis extending between the base and cover parts and to be displaceable along the axis between limits defined by said base and cover parts;

wherein said centrifugal separator further comprises a rotor restraint comprising:

a restraining surface forming part of, or carried by, the rotor and extending radially and circumferentially of the rotor and facing away from the base part, and

an abutment carried by the base part and having an abutment surface overlying the restraining surface at or beyond the limit of axial displacement of the rotor from the base part defined by the cover part, said abutment being operable to prevent further axial displacement of the rotor away from the base part if the cover part is removed; and

wherein the centrifugal separator further comprising means responsive to the presence of the abutment to facilitate securing of the cover part to the base part,

whereby the cover part is prevented from being attached to the base part if the abutment is missing.

14. (Amended) A centrifugal separator for separating solid contaminants from a liquid supplied thereto at elevated pressure, said separator comprising:

a housing having a base part and a cover part releasably secured to each other, and

a separation rotor contained in said housing between the base and cover parts, said rotor being mounted in said housing by a spindle so as to be rotatable about an axis extending between the base and cover parts and to be displaceable along the axis between limits defined by said base and cover parts;

wherein said centrifugal separator further comprises a rotor restraint comprising:

a restraining surface forming part of, or carried by, the rotor and extending radially and circumferentially of the rotor and facing away from the base part, and

an abutment carried by the base part and having an abutment surface overlying the restraining surface at or beyond the limit of axial displacement of the rotor from the base part defined by the cover part, said abutment being operable to prevent further axial displacement of the rotor away from the base part if the cover part is removed; and

wherein the centrifugal separator further comprising interlock means responsive to the presence of the abutment to enable supply of the liquid to the rotor, whereby the liquid is blocked from the rotor if the abutment is missing.

(Applicant's Remarks are set forth hereinbelow, starting on the following page.)